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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/751,859	01/06/2004	James J. Bartel	7663-000003/COD	4846
27572	7590	11/28/2005	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C.			VANAMAN, FRANK BENNETT	
P.O. BOX 828			ART UNIT	
BLOOMFIELD HILLS, MI 48303			PAPER NUMBER	

3618

DATE MAILED: 11/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/751,859

Applicant(s)

BARTEL, JAMES J.

Examiner

Frank Vanaman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-29 is/are pending in the application.
- 4a) Of the above claim(s) 13, 14, 20, 21, 27 and 28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-12, 15-19, 22-26 and 29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on Sept. 14, 2005 has been entered.

Status of Claims

2. Claims 9-29 are pending, with claims 13, 14, 20, 21, 27 and 28 withdrawn from consideration.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the load floor which extends from the front of the vehicle to the rear of the vehicle must be shown or the feature(s) canceled from the claim(s). Note that the drawings appear to illustrate a load floor which extends from a rear of the cab to the rear of the vehicle, but does not appear to extend to the front of the vehicle. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

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Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

4. Claims 9 and 16 are objected to because of the following informalities: In claim 9, lines 6-7 and claim 16, line 7, the phrase "said low profile suspension;" appears to be incomplete. Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 9-12, 16-19 and 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hilden (US 5,012,885, cited previously) in view of Vin (US 4,039,037). Hilden teaches a vehicle having an engine (128) having a power output through a single-segment drive shaft (126) which connects to a differential unit (18) held immovably on the vehicle frame (col. 3, lines 1-7); provided with a pair of swing axles (70, 72) which connect to drive the rear wheels (32) the differential unit being located at the rear axles; a low profile suspension (20, 22, 24, below frame portions 12, 14), the frame capable of supporting a load floor there-above (above 12, 14), which extends from the front of the frame portions to the rear of the frame portions and vehicle; the suspension including a pair of trailing arms (20, 22) pivotally mounted (at 40/48) outwardly of the frame portions 12, 14 which may support the load floor; a torsion box (30, 28) positioned between the trailing arms, an air spring system (34) between the torsion box and the frame underside; first and second wheel support members (88) which extend upwardly for the first and second trailing arms, wherein relative motion between the wheels and differential is allowed in the motion of suspension 20, 22, 24, whereby the wheel axes may be higher or lower than the output axes of the differential in use. The reference to Hilden fails to specifically teach the provision of a load floor on the frame portions. Inasmuch as it is very old and well known to provide a chassis with a

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floor, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide a load floor on the frame portions (12, 14) for the purpose of allowing the vehicle to carry items in transport.

The reference to Hilden fails to teach a step-down power transfer device having an input and an output which is axially offset from the input. Vin teaches a vehicle drive scheme wherein an engine output (3, 4) is stepped down by a geared axial drive converter (6, 7) having an input (connected to 5) and an axially offset output (connected to 7, 8). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the vehicle of Hilden with a step-down gearing as taught by Vin, allowing the output of the engine to be transmitted to an axially offset drive shaft, for the purpose of reducing the front-to-back slope of the drive shaft, facilitating a greater rearward displacement of the drive wheels with respect to the engine.

7. Claims 15, 22 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hilden in view of Vin and Maurer (cited previously). The references to Hilden and Vin are discussed above and fail to teach step-up gear drives connecting the axles and the wheels. Maurer et al. teach a drive scheme wherein driven wheels are driven by an offset axle (phantom, figure 1), including an input gear, a pair of intermediate gears and an output gear (figure 2). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a step-up gear system as taught by Maurer et al. to the vehicle of Hilden as modified by Vin, for the purpose of stepping up drive torque and dropping drive speed in a convenient and compact arrangement.

Response to Comments

8. Applicant's comments concerning the previously set forth rejections based on Mullican and Vin are noted and have been found persuasive. Of particular note is applicant's comments directed to the non-powered nature of the rear wheels of Mullican, which make the previous combination rejection untenable.

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Conclusion

9. Any inquiry specifically concerning this communication or earlier communications from the examiner should be directed to F. Vanaman whose telephone number is 571-272-6701.

Any inquiries of a general nature or relating to the status of this application may be made through either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A response to this action should be mailed to:

Mail Stop _____
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450,

Or faxed to:

PTO Central Fax: 571-273-8300

F. VANAMAN
Primary Examiner
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11/21/05